

Release D, Effective February 2008 See Bulletin Change Summary on last page

Scotchcal [™] Graphic Film

For Solvent and UV-Based Piezo Inkjet and Screen Printing Only

Product Description

Film IJ35 is a 3.2-mil vinyl film with a permanent, pressure-sensitive adhesive. It is designed for solvent and UV-based piezo inkjet printing as well as screen printing where a good quality film is needed for short to medium-term, indoor and outdoor promotional graphics. Possible uses include signs, trade show and point-of-purchase displays, exhibits and architectural applications.

Wall Graphics

Two-mil cast films are typically the best choice for indoor smooth surface wall graphics, although this film may be suitable for shorter term applications. In either case, the user is responsible for determining the product's suitability, including adhesion and, if required, removal characteristics. Due to the wide variability of smooth indoor walls, neither finished graphics nor removal is warranted, even for removable or changeable films. Instruction Bulletin 5.37 provides comprehensive information for the most successful wall graphics film selection and application.

Characteristics

All values are typical for unprocessed film and are not for use in specifications. Contact your 3M representative for a custom specification.

Physical Characteristics

Characteristic	Value
Material	Vinyl
Color	White opaque
Gloss	Matte IJ35-20; Gloss IJ35-10
Film thickness	Without adhesive: 3.2 mil (0.081 mm) With adhesive: 4.0 mil (0.102 mm)
Adhesive type	Pressure-sensitive
Adhesive color	Clear The adhesive is changing to gray, so your next roll of film may have gray adhesive.
Liner	Polycoated paper

Application Characteristics

Finished graphic application recommendations	Surface type: Smooth, flat and simple curved surfaces Substrate type: Metal, rigid plastic and painted substrates Application temperature: air and substrate 40° to 100°F (4° to 38°C)
Application method	Dry
Finished graphic exposure temperature	-59° to +192°F (-50° to +90°C)
Graphic removal	Permanent

Warranty and Durability

3M Basic Product Warranty

This product has been tested and is believed to be a good product when used as recommended in this Bulletin. The film is covered by the 3M Basic Product Warranty and is guaranteed to be free of physical and manufacturing defects. There is no warranty for printability, visual appearance, fitness for use or durability. See the 3M Graphics Market Center Warranty Brochure for the complete warranty and remedy details.

Expected Performance Life

3 years in a vertical orientation with typical usage

3M Product and Instruction Bulletins provide practical recommendations for using this product in a way that maximizes performance, but using other 3M products or procedures with this film does not change the terms of the warranty.

Warranty and Limited Remedy

The following is made in lieu of all other express or implied warranties, including any implied warranty of merchantability or fitness for a particular purpose or implied warranty arising out of a course of dealing, custom or usage of trade: all 3M products are warranted to be free of defects in materials and manufacture at the time of shipment and to meet the specifications stated in this Product Bulletin. 3M will replace or refund the price of any 3M materials that do not meet this warranty within the specified time periods. These remedies are exclusive. In no case shall 3M be liable for any direct, indirect, or consequential damages, including any labor or non 3M materials charges.

See the Graphics Market Center Warranty Brochure, which gives the terms, additional limitations of the warranty, if any, and limitations of liability.

Definitions

Vertical Exposure



face of graphic The face of the graphic is $\pm 10^{\circ}$ from vertical.

Fabrication

This film has been optimized to perform well with a variety of solvent and UV piezo inkjet printers and inks as well as solvent and UV screen printing inks. It is the graphic manufacturer's responsibility to determine the film's suitability for use with their printers and inks.

To maximize the film performance:

- For piezo inkjet printing, the typical maximum ink limit is 250%.
- Thoroughly dry the ink or cure the film before storing or installing a graphic.
- For solvent piezo inkjet printing only, if you are storing sheeted and stacked finished graphics for an extended period of time, leave an unprinted margin (about 1/4 inch) to allow for possible shrinkage before trimming the graphic.
- Use graphic protection. 3M[™] Scotchcal[™] Luster Overlaminate 8509 has been specially designed for use with 3M's piezo printed promotional graphic films.

Shelf Life, Storage and Shipping

Activity	Recommendations		
Shelf life	Total shelf life: 2 years Up to 2 years unprocessed, <i>OR</i> Up to 1 year processed and applied within 1 year of processing		
Storage conditions	 90°F (32°C) maximum Out of direct sunlight Clean, dry area Original container 		
Shipping finished graphics	Flat: may be separated by paper Roll: printed side out on 5 inch (13 cm) diameter or larger core		

Health and Safety



When handling any chemical products, read the manufacturers' container labels and the Material Safety Data Sheets (MSDS) for important health, safety and environmental information. To obtain MSDS sheets for 3M products go to 3M.com/MSDS, or by mail or in case of an emergency, call 1-800-364-3577 or 1-651-737-6501.

When using any equipment, always follow the manufacturers' instructions for safe operation.

3M Related Literature

Before starting any job, be sure you have the most current Product and Instruction Bulletins.

The information in 3M Product and Instruction Bulletins is subject to change. Current Bulletins are available at 3Mgraphics.com. The following applicable Bulletins provide information and processes you need to properly make the graphics described in this Bulletin. Additional Bulletins may be needed as indicated in the 3M Related Literature section of other 3M components you use.

Subject	Туре	Bulletin No.		
Bulletin types: PB = Product Bulletin; PB-IB = Product & Instruction Bulletin; IB = Instruction Bulletin				
3M™ Scotchcal™ Luster Overlaminate 8509	PB	8509		
Application, substrate selection, preparation and substrate-specific application techniques		5.1		
Application, general procedures for indoor and outdoor dry applications		5.5		
Storage, handling, maintenance, removal	IB	6.5		
3M Graphics Center Warranty Brochure go to www.3Mgraphics.com, Bullet		m, Bulletins		

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Bulletin Change Summary

Film IJ35 can now to screen printed. The film's adhesive is changing to gray soon, so depending on when you next order, the adhesive may be gray. The recommendation to leave a 1/4 margin unprinted applies only to solvent piezo inkjet printing and only when the printed graphics will be stored for a period of time before applying.



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